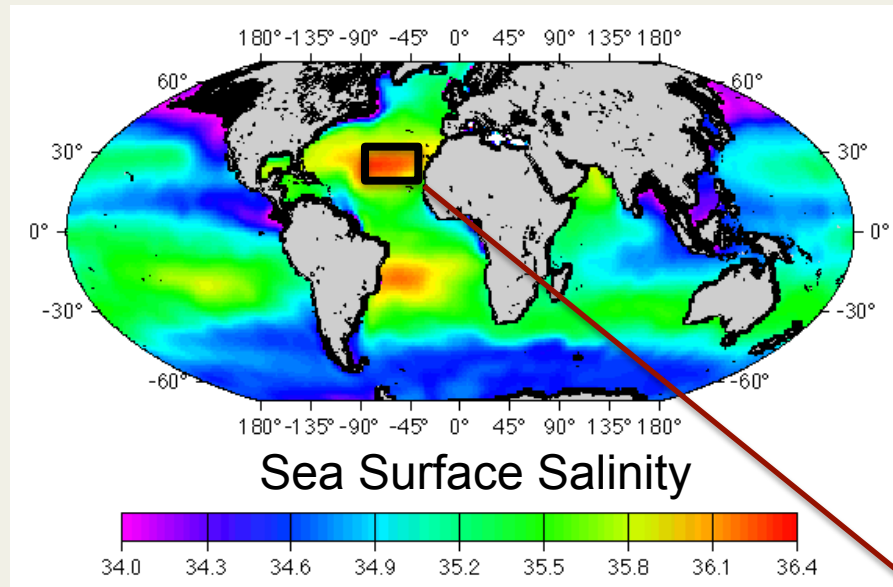


# SPURS 2012 Field Campaign

## Science Question: What is controlling the upper ocean salinity?

This question is addressed with measurements from satellites, ships, drifting surface buoys & profiling floats, gliders, AUVs and theoretical & numerical model simulations.

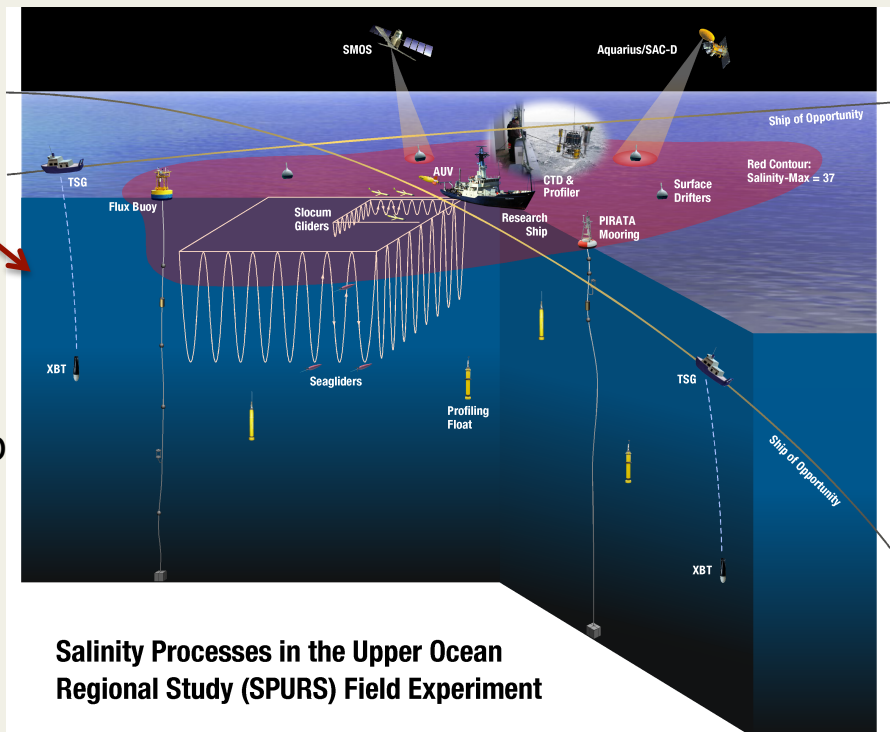


## Motivation

The upcoming launch of the Aquarius/SAC-D satellite motivates plans for a field campaign in the salinity maximum region of the North Atlantic.

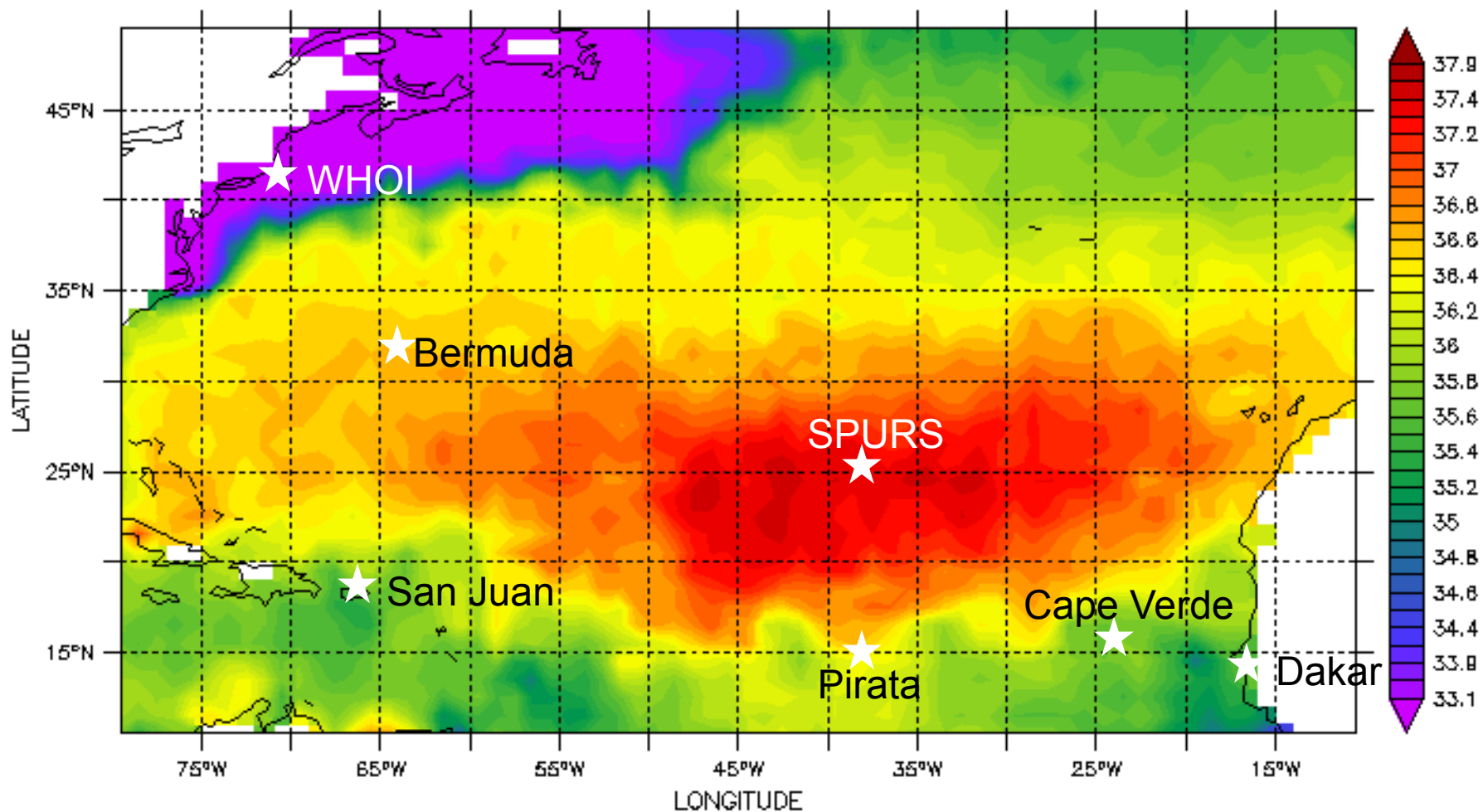
## Planning

- ✓ Community workshop in December 2009
- ✓ Workshop report published on the SPURS web site: <http://spurs.jpl.nasa.gov>
- ✓ Interagency/international collaborations being established
- ✓ Call for proposals in ROSES 2010



DEPTH (m) : 0  
TIME : 01-JAN-0000 00:00

DATA SET: HydroBase2 Monthly Mean T and S in Atlantic Ocean Smoothing at 1deg



salt monthly mean salinity [pss]

**Cruise Planning: ports and destinations**

# Resources/NASA

- Aquarius (Launch 9 June ~530am)
- SPURS Planning grant (Schmitt)
- 7 “Anchor” grants for SPURS field program (Riser, Farrar, Fratantoni, Lee, D’Asaro, Bingham, Chao)
- Existing Salinity Science Team grants (Asher, Gordon, Large, Maximenko)
- New Salinity Science Team grants (Carton and TBD)
- Ship time (\$1.5M in FY12/13)

# Resources/Other

- NOAA – Existing systems + TBD
  - Enhanced Atlantic observing system
  - Experimental mooring
- NSF – Existing systems + TBD
  - TBD (proposals under review)
- International
  - France, Germany, Ireland, Spain, UK
-

# Ships – Overarching question

- Can we do SPURS on an intermediate-class ship?
- If not, for certain activities, what are the alternatives?
- Is there a preferred ship?

# Ship Issues – Project Needs

- At-sea staffing needs (try to optimize a bit)-
- How many essential people are required for each group?
- How many other able-bodied help are needed (if other groups can provide help)?
- How many people can your group share to support other groups?

# Ship Issues – Project Needs

- How much inner lab space is needed, dry, wet, office, other requirements?
- How much deck space is needed for vans and other storage?
- How much below-deck, hold space is needed for storage?
- Should any special efforts be made with respect to underway measurements: adcp, T/S, met, nav, ctd...?

# Ship Issues – Program Req.

- Duration of each cruise-
  - How many dedicated days at sea does your group need, station and underway?
  - Can some of that time be used by other groups concurrently?
- Spacing of cruises-
  - What is the desirable interval between cruises?
  - What is the maximum allowable interval between cruises?



# Ship Issues – Program Req.

- What are the best ports for ship loading?
- What are the best ports for staff loading/offloading?

# SPURS Data Management

“The challenge of our time is to serve the public and ocean applications with near-real-time data and analysis while simultaneously conducting cutting-edge research and observations.”

EJL 1/25/11

# Data Policy

- A draft data sharing policy has been distributed
- We need to reach consensus on the policy at this meeting, and agree to abide by it as we go forward
- Timely and complete data sharing benefits us all

# Science Planning

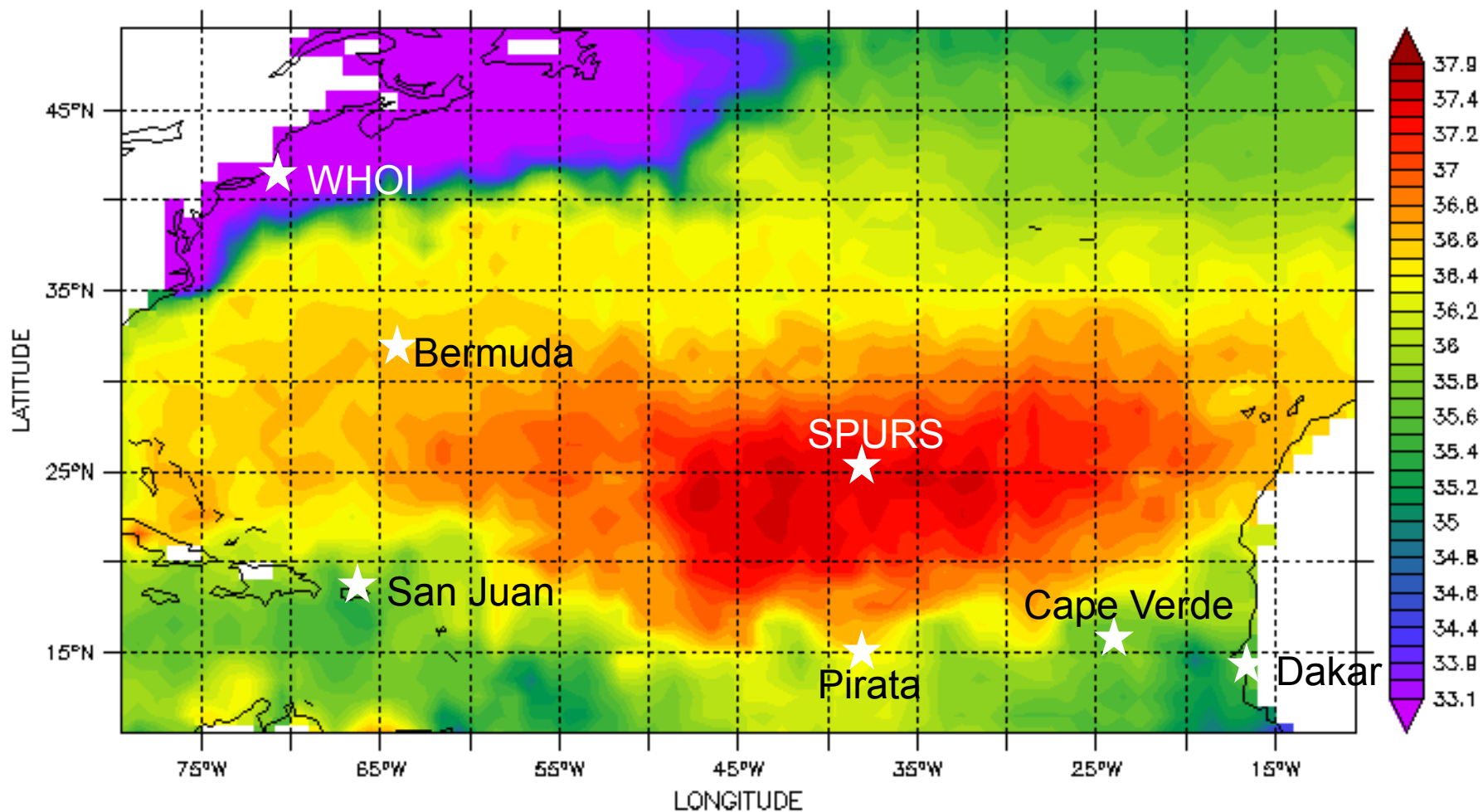
- This workshop initiates SPURS group planning.
- How much more is needed? When, where, and why? How will we document our plans (SPURS Implementation Plan)?
- What is our leadership structure and how are decisions to be made?
- How will we resolve disputes?

# Implementation

- This field program is unprecedented in its structure and audacity.
- What is required for success at sea?
- What is required for successful remote command and control?
- Are key elements missing from our team and resource allocation?
- What are the key risks and can we develop mitigation plans?

DEPTH (m) : 0  
TIME : 01-JAN-0000 00:00

DATA SET: HydroBase2 Monthly Mean T and S in Atlantic Ocean Smoothing at 1deg



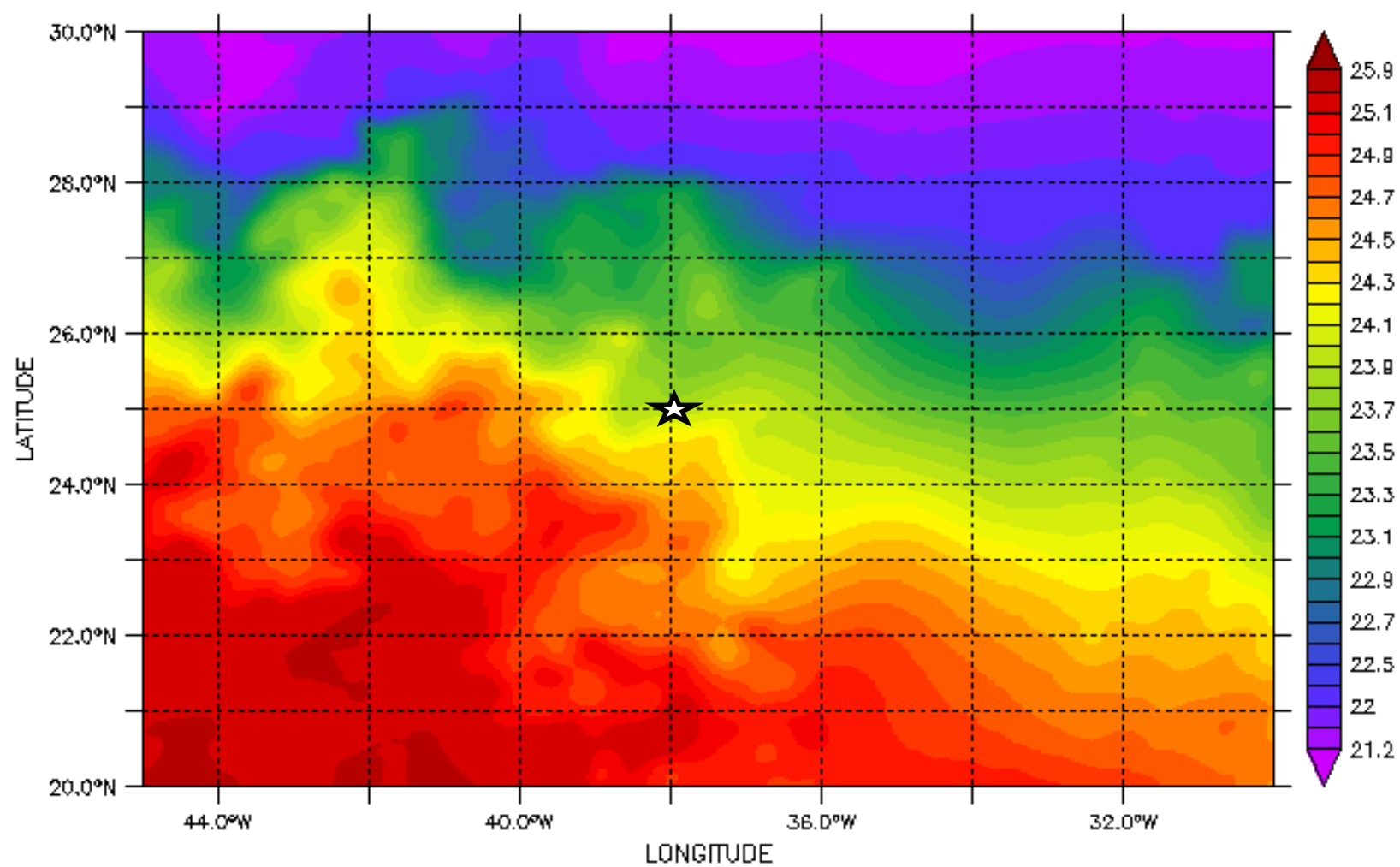
salt monthly mean salinity [pss]

**Cruise Planning: ports and destinations**

LAS 7.+ / Ferret 6.2 NOAA/PMEL

HEIGHT (millibar) : 1  
TIME : 15-JAN-2010 00:00

DATA SET: NRL NLOM 1/32deg Nowcast Delay



SST (degree)

LAS 7.+/Ferret 6.2 NOAA/PMEL

HEIGHT (millibar) : 1  
TIME : 15-FEB-2010 00:00

DATA SET: NRL NLOM 1/32deg Nowcast Delay

